UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,679	10/05/2001	Bernard Gelloz	Q66527	1846

7590 06/13/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER
MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/970,679	GELLOZ ET AL.	
	Examiner	Art Unit	
	William H. Mayo III	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *22 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on __ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *11* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed April 22, 2003 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thuries (Pat Num 5,089,665) in view of Floessel et al (Pat Num 3,916,081).

Thuries discloses a gas insulated multi-phase lines (Figs 1-11) being surrounded by a metal enclosure thereby creating a gas tight enclosure (Col 1, lines 5-8). Specifically, Thuries discloses a gas insulated line (Fig 8) made up of sections (201 & 301) wherein each section (201 & 301) is formed by metal cladding (i.e. aluminum sheath Col 5, lines 25-33) filled with dielectric gas under pressure (Col 5, lines 45-50) and containing at least one conductor (220 & 221), wherein the two adjacent sections (201 & 301) are connected together by a connection module (302 & 303), whose metal claddings are locally made up of a plurality of tubular portions (302 & 303), that are each filled up with dielectric gas (Cols 5 & 6, lines 65-68 & 1-5) and has a conductor (221 & 222) passing through the tubular portions (Fig 8) constituting a passive electrical connection (Col 6, lines 29-30). With respect to claim 2, Thuries discloses that the connection module (302 & 303) is open at both ends so that the volumes of the sections (201 & 301) communicate with each other (Fig 8). With respect to claim 3, Thuries discloses that the connection module (302 & 303) may be closed in a gastight manner by one or more insulators (320) at either or both of it's ends (Fig 8) so as to isolate two adjacent sections (201 & 301) from each other and to isolate the module (302 & 303) from the sections (201 & 301, Col 6, lines 1-11). With respect to claim 4, Thuries discloses that the connection module (302 & 303) has a metal cladding made up of a first dish-shaped end cap (at 302) and of a second dish shaped end cap (at 303), wherein the caps (at 302 & 303) are provided with orifices of apertures (where the conductors 221 & 222 passes through) determined to enable the conductor (221 & 222) to pass through them with sufficient isolation distance from the cladding (at 302 & 303), and wherein each

tubular portion of the connection module (302 & 303) is formed of a link tube (313 & 307) surrounding the orifice in the first end cap and the orifice of the second end cap (10), through which the conductor (221 & 222) passes (Fig 8). With respect to claim 5, Thuries discloses that the connection module (302 & 303') is extended by the link tubes (313 & 307) thereby forming an integrally molded single piece therewith (Fig 8). With respect to claim 6, Thuries discloses that the tubular portions are mutually parallel (Fig 8). With respect to claim 8, Thuries discloses that each of the tubular portions are surrounded by gas (Col 6, lines 1-10). With respect to claim 10, Thuries discloses that the connection module (302 & 303) may have sensors disposed in the air in the vicinity of the tubular portions (317, i.e. service module, Col 5, lines 65-68).

Thuries doesn't necessarily disclose the conductor being a multi-phase conductor disposed in a triangular configuration (claim 1), nor the three tubular portions being disposed in an equilateral triangle (claim 7).

Floessel teaches multi-phase lines (Figs 2-3) comprising three conductors (3R, 3S, 3T. Specifically, with respect to claims 1 & 7, Floessel teaches that the three conductors (3R, 3S, 3T) are disposed in three tubes (Figs 2a-2b) spaced from each other by springs (2) that are spaced from each other by 120° (Col 2, lines 20-30), thereby forming a equilateral triangle.

With respect to claims 1 & 7, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the three conductors of Thuries to comprise the conductors being spaced from each other by 120° as taught by Floessel, since it has been held that a change in form cannot sustain

patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc. (CA 8, 1982) 215 USPQ 835.*

5. Claims 9 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thuries (Pat Num 5,089,665) in view of Floessel et al (Pat Num 3,916,081, herein referred to as modified Thuries), as applied to claims 1 & 4 above, further in view of Applicant Own Admission (herein referred to as AOA). Modified Thuries discloses a gas insulated multi-phase lines (Figs 1-11) being surrounded by a metal enclosure thereby creating a gas tight enclosure (Col 1, lines 5-8).

However, modified Thuries doesn't necessarily disclose the winding of secondary of the current transformer disposed in the air (claim 9), nor the method in which the winding is first put in place around a tubular portion before the two end caps are assembled (claim 11).

AOA teaches that gas insulated lines commonly comprise multi-phase conductors (see Page 1, lines 1-26 of Applicant's specification). Specifically, with respect to claim 1, 9, and 11, AOA teaches that gas insulated lines commonly comprise multi-phase conductors made up of sections having orifices at sufficient distances for each other and having windings that form secondary of the transformer being disposed around phase conductors which are disclosed in tubular metal claddings filled with gas under pressure , wherein the winding is put in place around the tubular portion (Page 1, lines 5-15 of specification).

With respect to claims 1, 9, and 11, It would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the gas

insulated line of modified Thuries to comprise the multi-conductor configuration as taught by AOA because AOA teaches that such a configuration is commonly utilized as a gas insulated line (see Page 1, lines 5-26 of specification).

Response to Arguments

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Pham et al (Pat Num 5,571,990), Stephanides (Pat Num 3,610,947), Olsen (Pat Num 3,814,831), Fox et al (Pat Num 3,864,507), Wootton (Pat Num 4,135,130), Liejon et al (Pat Num 6,002,084), Thuries et al (Pat Num 5,571,989), all of which disclose gas insulated cables.

8. Based on the new rejection, this action is non-final.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

WHM III
June 9, 2003